



Interoffice Memorandum

January 24, 2020

From: Leigh Simmons
To: Rob Zuber

**Subject: Bowie No. 2 Mine (Permit No. C-1996-083)
TR-121**

As you requested, I reviewed the material submitted by J.E. Stover & Associates in support of the TR-121 application. I also reviewed groundwater monitoring data submitted with the most recent Annual Hydrology Report (received May 14, 2019).

TR-121 proposes to reduce the frequency of bedrock groundwater monitoring at the Bowie 2 mine from quarterly to annually.

Rule 4.05.13(3)(b) contemplates the liability period for the monitoring of groundwater (and surface water). The rule states that:

After disturbed areas have been regraded and stabilized according to this rule, and after cessation of use of underground mine workings, the person who conducts surface or underground mining activities shall continue to monitor surface water and ground water quality and quantity in accordance with the approved plan. Data from this monitoring may be used to demonstrate that these qualities and quantities of runoff without treatment are consistent with the requirements of 4.05; that the operation has minimized disturbance to the hydrologic balance in the permit and adjacent areas; that the operation has prevented material damage to the hydrologic balance outside the permit area; and that the water rights of other users have been protected or replaced. Based on this demonstration, the operator may request reduction or deletion of the monitoring program or control system.

I have the following comments:

1. Although no coal is currently being mined at the Bowie 2 mine, it is my understanding that the mine workings have not been sealed and reclamation of the surface facilities has not begun. Furthermore, the status of the mine is "active". Given the context, it's my opinion that the first criterion of the rule has not been satisfied, i.e. the use of underground mine workings has not yet ceased, therefore there is currently no justification to reduce or delete the monitoring program.



2. The packet submitted with the TR-121 application did not contain a demonstration based on previous monitoring data that:
 - a. The operation has minimized disturbance to the hydrologic balance in the permit and adjacent areas;
 - b. The operation has prevented material damage to the hydrologic balance outside the permit area; and
 - c. The water rights of other users have been protected or replaced

(A demonstration that the qualities and quantities of runoff without treatment are consistent with the requirements of 4.05 is not applicable to this situation).

Although I recommend denying the application on the grounds that it is premature, it is worth pointing out for the future that the burden to make a demonstration based on previous monitoring data is on the applicant rather than the Division.